UNITED
NATIONS

A

General Assembly

Distr.
GENERAL

A/CONF.151/PC/19
23 January 1991

Original: ENGLISH

PREPARATORY COMMITTEE FOR THE UNITED NATIONS
CONFERENCE ON ENVIRONMENT AND DEVELOPMENT
Second Session
Geneva, 18 March - 5 April 1991

Item 2 (c) of the provisional agenda

PREPARATIONS FOR THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT ON THE BASIS OF GENERAL ASSEMBLY RESOLUTION 44/228 AND TAKING INTO ACCOUNT OTHER RELEVANT GENERAL ASSEMBLY RESOLUTIONS: CROSS-SECTORAL ISSUES

Environmental health aspects of development

Progress Report of the Secretary-General of the Conference

Reference is made to Decision 1/28 of the Preparatory Committee for the United Nations Conference on Environment and Development (UNCED) which is addressed to the World Health Organization. In response, the WHO has prepared a first progress report which is submitted hereunder to the Preparatory Committee for its consideration.

In particular, the attention of the Preparatory Committee is drawn to the last section on the future work programme. A procedure and time schedule is outlined through which the results of the work of the WHO in the subject area of health and environment will be made available.

Background

The United Nations General Assembly in its forty-fourth session identified in resolution 44/228 "... protection of human health conditions and improvement of quality of life" as one of the major environmentally-related issues. At its first session, the Preparatory Committee for the United Nations Conference on Environment and Development decided that this issue would not be considered by their established two Working Groups, but that it would be dealt with as a cross-cutting issue. The first substantive session of the Preparatory Committee in considering this matter invited in decision 1/28 "... the World Health Organization, in co-ordination and consultation with the Secretary-General of the Conference, to contribute specific suggestions on the health dimension of environmental problems for further consideration in the preparatory process". It is opportune that the WHO Commission on Health and the Environment, established by the Director-General of WHO in early 1990, is conducting a comprehensive review of the linkages between health, environment and development. As part of this effort, the Commission will not only prepare a research agenda for the future, it will also recommend strategies for combating major health problems. The work and recommendations of the WHO Commission will provide the appropriate health inputs into the preparatory process of the United Nations Conference on Environment and Development. This report highlights some of the major health issues involved and provides a progress report on the work of the WHO Commission.

Health aspects of environment and development

Health is closely linked with the quality of the environment and the state of development. The lack of development in many countries continues to go hand-in-hand with deteriorating environmental conditions such as inadequate shelter, contamination of food and water and lack of sanitation, all of which exert a heavy toll on human health and life itself. Clearly social and economic development is needed to bring about a change for the better. Development itself, however, if not sustainable, brings with it adverse effects both for the environment and people. Examples of such effects abound: heavy air pollution in cities, severely contaminated water courses, deforested watersheds, and literally mountains of waste, some of which can be very hazardous. Many countries in Africa, Asia and Latin America are bearing the brunt of such counter development; losing vital resources as their populations continue to grow.

Health is an indispensable ingredient for sustainable development. As stated by a WHO Expert Committee in 1985 "Healthy people, and the energy that they expend in intellectual and physical labour, are vital for successful development. On the other hand, health is an important outcome of development, because it depends first and foremost on such factors as the availability of safe and nutritious food, uncontaminated water, a clean environment, a decent shelter, and an effective health care system that places emphasis on prevention. The promotion and protection of health at the community level should therefore be one of the objectives of the development

effort. Development without adequate consideration for health and environmental safeguards can prevent the improvement of living conditions for the very people whom the development effort was intended to benefit".

Each of the substantive issues considered by the two Working Groups of the Preparatory Committee have health dimensions, although to varying degrees; health considerations are central for dealing with urbanization, freshwater supplies, toxic chemicals, and hazardous wastes, but less so with issues such as biodiversity. With respect to climatic change, for example, health concerns include the effects on people exposed to changes of temperature, the spread of tropical diseases to currently temperate areas and the health problems arising from the creation of millions of environmental refugees, forced to abandon their homes by rising seas. Likewise, thinning of the ozone layer increases ultraviolet radiation, giving rise to an increase in skin cancers, among other health concerns. Desertification and drought have fostered nutritional problems while an adequate supply of fresh water is essential to prevent exposure to water-borne biological and chemical contaminants. The proper management of chemicals and hazardous wastes is very important for health; failure to do so can result in dangerous risks to human populations.

Communicable diseases constitute a major burden on human health, well-being and working capacity in many developing countries. Although these health concerns are not explicitly addressed by the Working Groups agenda, they are closely tied to development and environmental issues. They include diarrhoea, which kills approximately 5 million infants per year; malaria, which infects well over 100 million people annually; and, typhoid and cholera, which are endemic in many developing countries.

Many of the widely occurring communicable diseases have an environmental reservoir or pathway of the disease vector. Thus, the risk of resurgence of these communicable diseases depend upon the effective control of the environmental vector. The validity of such risks has been demonstrated in the past with malaria which increased after efforts to control the mosquito vector relaxed. More recently, the rapid expansion of irrigation schemes and other water development projects has led to a substantive resurgence of schistosomiasis in areas where it had almost vanished. About 200 million infections are reported per year with reduced working abilities as the main consequence for the development of the affected rural populations.

Another set of major health concerns arise from rapid and uncontrolled urbanization. Between a quarter and one half of all of the inhabitants in developing world cities live in overcrowded squatter settlements and slums and, according to estimates of the United Nations, by the year 2000 almost 52 per cent of the total world population will live in cities. As cities continue to swell, populations outstrip vital services such as the provision of clean water, sanitation, and medical care.

The WHO Commission on Health and Environment

The World Commission on Environment and Development, in its report in 1987, reviewed the relationship between development and environment and called for action on all fronts to reverse the trend of environmental degradation. It emphasized the crucial need to use the environment in a rational way in order to achieve sustainable development, defined as a "process .... ". Consequently, the WHO Director General, in his statement to the Forty-second World Health Assembly, announced his intention to convene a high-level technical expert commission on health and environment, and this body was established in early 1990.

The Commission comprises an independent group of 23 experts of international renown in the scientific, social and political fields. It is supported by four panels, each with a membership of about 10 experts, dealing with food production and agricultural practices, industrial activities, energy production and use, and urbanization. These four key issues have been identified as major driving forces in the process of development and major causes of environment-related health problems. The role of these panels is to gather and analyse data and to provide the expertise and background information necessary for the work of the Commission.

The overall objective of the Commission is to assess the consequences to human health of present and foreseen environmental factors associated with, or arising from, socio-economic development. The Commission is expected to make an authoritative statement on their importance, as well as identify the priorities and approaches for dealing with them.

Specifically, the objectives are to:

- describe the main environmental factors affecting human health - whether they promote health or are hazards to health - in the process of socio-economic development;

- identify the health consequences of exposure to these environmental factors, and to determine to the extent possible, the causal relationships;

- indicate the trends to be expected over the next two decades under foreseeable conditions, including the development of new technologies;

- indicate the research needed to better predict and understand the adverse health consequences of exposure to environmental factors;

- recommend to WHO and the world community strategies to prevent or mitigate the most serious environmental health trends.

Progress of the Commission to date

The Commission held its first meeting on 19-21 June 1990, including representatives from FAO, IAEA, UNCHS, UNICEF, UNFPA, UNEP, UNIDO, UNCED, CIOMS, OECD, and ICC. The Commission decided upon the scope of its work and agreed on its objectives and the organization of its work under the four main developmental driving forces. In addition, the Commission would consider separately a number of cross-sectoral issues. These include problems such as population growth and migration, problems of transportation, as well as the interaction of these with the four main driving forces. The Commission also intends to consider the ethical implications of the problems of environment and health and of the choices they imply for society.

The Commission has asked all Panels to consider, inter alia, procedures for the risk assessment of individual pollutants from various sources; the implications of new and future developments, e.g., biotechnology, alternative fuels, etc.; the development of data for the application of cost/benefit approaches as a basis of policy guidelines for decision makers; and the assignment of priorities to issues of general environment and public health impact. In general, the Commission and its Panels intend to be highly selective in the issues to be dealt with, highlighting those problems of primary interest to Governments, especially those of developing countries.

In the field of energy the Commission has requested that the significance of global or regional problems such as the greenhouse effect and acid precipitation compared to the more direct health effects of energy production and use should be taken into account by the Energy Panel. Concerning the work of the Food and Agriculture Panel the Commission considered that there would be a need for the Panel to examine the health impact of chemical and microbiological contamination of food, cash crop farming, of rangelands management, of inland and ocean fisheries and of other relevant agriculture, fisheries and forestry activities.

The Commission in its report intends to make a sharp distinction between those environmental issues that related directly to human health and well-being, and those related to the management of natural resources which may have health implications. The Commission will also endeavour to reflect a balance between the positive and negative consequences for health of the different activities it considers.

The Panels of the Commission

The four panels on Energy, Food and Agriculture, Industry and Urbanization held their first meeting on 24-29 June 1990. The panels decided on the outline of their respective reports and on the drafting tasks to be assigned to individual contributors from within the panels, as well as to outside experts.

The second meeting was held on 10-14 December 1990. The panels reviewed the contributions and provided detailed guidance that would make it possible

for the Chairmen and the Secretariat to complete the reports, at least in preliminary form, by mid-February 1991. The final text would be available in the autumn of 1991.

(i) Energy Panel

The report will assess the health impact of the main energy resources, i.e. fossil fuels, biomass, hydropower, and nuclear power, as well as the effects of exposure to electro-magnetic force from electricity transmission lines. The different energy sources will be compared and four priority issues examined in detail - indoor and outdoor urban air pollution, climate changes and accidents - as those that are the actual or potential cause of major concern. Research needed to understand more fully the health effects of the energy cycles and to reduce the environmental consequences of the cycles that have health implications, as well as strategies for improving planning and mitigating consequences will be discussed.

(ii) Food and Agriculture Panel (including water resources)

The report will reflect the progress and contributions of agricultural, fisheries and food technologies and their management to meeting the right of individuals to an adequate, safe, nutritious, and affordable food supply, as well as the continuing requirement to apply these technologies in a manner consistent with environmental sustainability. It will analyse the environmental determinants affecting health which are associated with food and agriculture and indicate as far as is feasible their impact on health. The report will endeavour to address the challenges of the next two decades, to identify research and development needs and to propose strategies to manage environmental health concerns in the agriculture, fisheries, food and related water sectors.

(iii) Industry Panel

The report will examine the health implications of the environmental effects of industrial activities by focusing on the 15 industrial sectors considered to cover most of the industry activities. Emphasis will be laid on the benefits that countries, especially developing countries, will derive from industrial development conducted in such a way as to minimize or altogether prevent its harmful effects on the environment. Case studies of countries where poor planning of industrial development and failure to anticipate its environmental consequences have led to serious health problems will be included. The report will deal both with the occupational environment and the environment at large. Because sound environmental planning requires information that is often not available, the report will single out the areas where research is most urgently needed. It will then outline some general strategies required to control the adverse effects of industrial activities, such as the systematic use of environmental impact statements, emergency planning, siting, process management, education for the mass media, and community participation.

(iv) Urbanization Panel

The report will deal with the scale and nature of urban change, the relative significance and interaction of the social and physical environments and the inter-linking of environment, health and development. Issues of rapid urban growth and their impact upon environmental health in cities, especially concerning the basic services and infrastructures of cities in the third world, will be reviewed in the report. Appropriate management techniques will be discussed to assist in decision-making so as to exercise the right choices in urban planning and development and thus reduce adverse environmental and health impacts.

Future work programme

The Commission will hold two further meetings, on 18-22 March 1991 and 15-19 July 1991. Its full report will be submitted to the Director-General of WHO in the autumn of 1991 and then placed before the WHO Executive Board at its eighty-ninth session. It will therefore be made available to the Preparatory Committee at its fourth session in early 1992. However, the Preparatory Committee will, at its third session in August 1991, receive a summary of the Commission's expected conclusions and suggested strategies to prevent or mitigate serious consequences to human health arising from developmental activities and environmental changes.